

## REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a partial response to the Official Action dated July 21, 2005 and the Advisory Action dated September 30, 2005. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

### Status of the Claims

Claims 1-6 and 11-16 are under consideration in this application. Claims 1, 6 and 12 are being amended, as set forth above and in the attached marked-up presentation of the claim amendments, in order to more particularly define and distinctly claim Applicants' invention. New claims 15-16 are being added to recite other embodiments described in the specification.

All the amendments to the claims are supported by the specification. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

### Formality Objections & Rejections

As indicated in the Advisory Action, the response filed on August 21, 2005, overcame all formality objections to the claims, the drawings, and the specification. Claims 1-5 and 11 remain rejected under 35 U.S.C. § 112, first paragraph, on the grounds that claim 1 recites new matter of "said network sending a first network address assigned to said user computer from said Internet service provider to said access server."

The method (for example, the embodiment depicted in Fig. 7; pp. 10-14) for providing a data communication service (Fig. 1), which connects a user computer 311 (Fig. 3) to an Internet service provider 305 via an access server 331 and a network 304 (including an address translation apparatus 341), comprises: a step of connecting the network 304 to the Internet service provider 305 via a first router 347 and to the access server 331 via a second router 346 respectively; a step 701 of said user computer 311 communicating with said access server 331 based on a point-to-point protocol (e.g., LCP; p. 11, line 15); a step of said access server 331 receiving a user ID and a password from said user computer 311 based on an authentication protocol (e.g., CHAP, p. 11, line 20); a step of said access server 331 sending said user ID and said password to said network 304; a step of said network 304 sending a first network address (i.e., a public IP address) assigned to said user computer 311 from said Internet service provider 305 to said access server 331 after authenticating a respective user

by using said user ID and said password; a step of said access server 331 sending a second/private network address to said user computer 311 based on a control protocol (e.g., IPCP, p. 11, last line to p. 12, line 3); a step 709 of said network 304 translating the second/private network address sent from said user computer 311 to said first/public network address; and a step of establishing communication between said user computer 311 and said Internet service provider 305.

As indicated, claim 1 is being amended as required by the Examiner. Accordingly, the withdrawal of the outstanding informality rejection is in order, and is therefore respectfully solicited.

#### Prior Art Rejections

Claims 6 and 12-14 were rejected under 35 USC § 103(a) as being unpatentable over US Pat. No. 6,490,289 to Zhang (hereinafter "Zhang") in view of the prior art stated in the present specification (pages 1-4, Figures 1-2; "AAPA"), further in view of US Pat. No. 6,493,348 to Glelman et al. (hereinafter "Glelman") and US Pat. No. to 6,243,754 Guerin et al. (hereinafter "Guerin"). This rejection has been carefully considered, but is most respectfully traversed in view of the newly submitted claims, as more fully discussed below.

The invention as now recited in claim 6 is directed to an address translation apparatus 341 (for example, the embodiment depicted in Figs. 7-8, 14-15; pp. 11-12 & 20-23) connected via a first router 346 to an access server 331, which is connected to plural user computers 311, and via a second router 347 to a network which is connected to plural Internet service providers 305, 306, comprising: an authenticating part 1402 which authenticates a user by using a private network user ID (e.g., "XXX" in Fig. 8) and a private network password received from said access server 331 to retrieve and send a corresponding ISP user ID (e.g., "abc") and a corresponding ISP password ("def") to an ISP-A contracted to provide internet services to the user so as to authenticate the user by the ISP-A (steps 705-706 in Fig. 7; p. 15, lines 7-18; Fig. 8, p. 14, last paragraph), and said authenticating part sends a private network address assigned to said user to said access server 331 by using a point-to-point protocol (e.g., LCP; p. 11, line 15; p. 21, 1<sup>st</sup> full paragraph); a translating part 1403 which translates the private network address into a public IP network address assigned to said user computer by one of said Internet service providers (p. 21, 2<sup>nd</sup> full paragraph); and an output part 1405 which outputs said public IP network address to said network (p. 22, 1<sup>st</sup> paragraph).

As such, the an address translation apparatus 341 does not directly authenticate the user, but "relay" the authentication to the ISP-A contacted with the user to provide internet

services. By automatically “relaying” the authentication (Steps 706 and 707 in Fig. 7) from the communication/network service provider 304 to the ISP 305, the communication carrier (Network Operator) 304 not only connects between a user computer 311 and the ISP 305, but also provides contents-supply services to a user computer 311 via Point-to-Point Protocol (PPP) (“a local service server 344 used by the communication enterprise to provide its users with contents inside its own network not via the Internet” p. 10, lines 17-19).

In contrast, as admitted by the Examiner, Zhang does not authenticates a user when the use is connected to the service provider (p. 8, paragraph 27 of the outstanding Office action). The AAPA depicted in Fig. 1 (p. 3, lines 11-14) was relied upon by the Examiner to compensate for Zhang’s deficiency (p. 7, paragraph 25 (b) of the outstanding Office action). However, the AAPA depicted in Fig. 1 only teaches that when the destination ISP is decided, the user authentication is done in the ISP authentication server 141 or 151 according to the ISP user name and the ISP password (p. 3, lines 11-14), which does not involves any non-ISP intermedium server which “relays” the authentication to the ISP contacted with the user to provide internet services as the invention.

Regarding the AAPA depicted in Fig. 2, it shares the same deficiencies as the AAPA depicted in Fig. 1. The user authentication is done by the authentication server 232 in the ISP 203 according to the ISP user name and the ISP password (p. 4, last paragraph), rather than via any non-ISP intermedium server which “relays” the authentication to the ISP contacted with the user to provide internet services as the invention.

As to other cited references, an address is translated after user-authenticating by each ISP and by each service provider individually and separately, rather than via any non-ISP intermedium server which “relays” the authentication to the ISP contacted with the user to provide internet services as the invention.

In addition, none of the cited references teaches or describes that “the ISP is disconnected automatically after communication between the ISP and the user stops fro a predetermined time period” as recited in claims 15-16.

Applicants contend that neither Zhang, AAPA, Glelman, Guerin, nor their combinations teaches or discloses each and every feature of the present invention as disclosed in independent claim 6. As such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

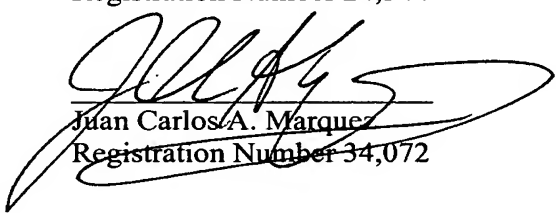
Conclusion

In view of all the above, clear and distinct differences as discussed exist between the present invention as now claimed and the prior art reference upon which the rejections in the Office Action rely, Applicants respectfully contend that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and phone number indicated below.

Respectfully submitted,

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